



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,289	04/06/2000	Takayuki Hiyoshi	0557-4956-3	8132
22850	7590	07/22/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PHAM, HAI CHI	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/544,289	<b>Applicant(s)</b> HIYOSHI, TAKAYUKI	
	<b>Examiner</b> Hai C Pham	<b>Art Unit</b> 2861	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 25-37, 39, 42 and 43 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-6, 40 and 41 is/are allowed.
- 6) ☒ Claim(s) 1, 7, 20-23 and 38 is/are rejected.
- 7) ☒ Claim(s) 8-19 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 1-24, 38, 40 and 41, in the reply filed on 04/05/04 is acknowledged. The traversal is on the grounds that "the claims of the present invention would appear to be part of an overlapping search area". This is not found persuasive because Group I includes claims drawn to the basic structure of the optical write head along with the adjusting mechanism for adjusting the alignment of the light emitting points along the vertical direction as well as for adjusting the focal points of the light beams emitted from the light emitting elements onto the surface to be scanned. Group II includes claims drawn to the electronic portion of the optical write apparatus for correcting the light emission amount of the light emitted from the light emitting elements. The limitations of inventions I and II are therefore mutually exclusive such that the search for one invention would not overlap with the search for the second invention.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 25-37, 39 and 42-43 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 04/05/04.

***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***List of Related Cases***

4. The Lists of Related Cases submitted on 12/13/00 and 01/24/02 are being considered by the examiner and are filed on the record.

***Specification***

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Objections***

6. Claim 12 is objected to because of the following informalities:
- Claim 12 appears to wrongly claim dependency from claim 10 since it recites the following limitations "the external force", "the first external force unit", "the connecting member", which belong to claim 11 and are absent in claim 10.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2861

8. The following claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20:

- Claim 20 recites a series of limitations, which lack antecedent basis, and which come from different claims from which claim 20 does not claim dependency, namely, "the auxiliary member" of claim 2, "the vertical direction adjusting unit" of claim 14, while claim 20 is dependent from claim 10.

Claims 21-23 are dependent from claim 20 above, and are therefore indefinite.

Appropriate correction is required.

***Double Patenting***

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 2861

10. Claims 1, 7 and 38 are rejected under the judicially created doctrine of double patenting over claim 1 of U. S. Patent No. 6,456,313 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

- Claim 1 of U. S. Patent No. 6,456,313 recites an optical writing device comprising a plurality of light-emitting element array substrates, each comprising a plurality of light-emitting elements arranged in a line", "said plurality of light-emitting element array substrates being placed in parallel and partly in an overlapping formation", and "a plurality of connecting members, each connecting member for connecting two adjacent light-emitting element array substrates of said plurality of light-emitting element array substrates to each other", which are included in Claim 1 of the present invention.
- Claim 1 of U. S. Patent No. 6,456,313 further recites "each connecting member for connecting two adjacent light-emitting element array substrates of said plurality of light-emitting element array substrates to each other around a position, at which an operation for writing dots with said plurality of light-emitting elements, is switched from one of said plurality of light-emitting element array substrates to a subsequent one of said light-emitting element array substrates", which is included in Claim 7 of the present invention.

Art Unit: 2861

- With regard to claim 38, the claimed photosensitive member is inherently included such that the optical writing device irradiates the photosensitive member to form a latent image.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

### ***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Obinata et al. (JP 11-58812).

Obinata et al. discloses an LED print head comprising a plurality of substrates (1) each having a large number of light emitting diodes (LED arrays 2) aligned in one direction, the plurality of substrates being shifted from each other in the aligning direction of the light emitting diodes (Fig.2) wherein two substrates adjacent to each other in the aligning direction of the light emitting diodes are fixed to each other (fixing member 6 provided between the adjacent substrates as cushioning members).

Art Unit: 2861

13. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yazawa et al. (U.S. 5,870,128).

Yazawa et al. discloses a light emitting device assembly having in-line light emitting device arrays (1) formed on corresponding substrates (3), wherein adjacent substrates are fixed to each other via connecting members (5).

***Allowable Subject Matter***

14. Claims 2-6 and 40-41 are allowed.

15. Claims 8-19 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. Claims 20-23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

17. The following is an examiner's statement of reasons for allowance: the primary reason for the indication of the allowability of claim 2 is the inclusion therein, in combination as currently claimed, of the limitation "auxiliary members interposed between the substrate adjacent in the aligning direction of the light emitting diodes" and "wherein fixed points between the auxiliary members and the substrates are aligned in a line that is perpendicular to the aligning direction of the light emitting diodes", which are not found taught the prior art of record considered alone or in combination.



Art Unit: 2861

The primary reason for the indication of the allowability of claims 10, 17 and 40 is the inclusion therein, in combination as currently claimed, of the limitation "focusing unit that displaces a first substrate of two adjacent substrates with respect to a second substrate of the two adjacent substrates in a focusing direction that is equivalent to a thickness direction of the second substrate", which is not found taught the prior art of record considered alone or in combination.

The primary reason for the indication of the allowability of claims 8 and 14 is the inclusion therein, in combination as currently claimed, of the limitation of "a vertical direction adjusting unit", which is not found taught the prior art of record considered alone or in combination.

Claims 3-6, 9, 11-13, 15-16, 18-19, 24 and 41 are allowed because they are directly or indirectly dependent from claims 2, 8, 10, 14, 17 and 40 above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

Art Unit: 2861

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HAI PHAM  
PRIMARY EXAMINER

July 16, 2004